CLAIMS

We claim:

1. A method of performing a research task within a searchable database comprising the steps of:
    a. utilizing a selective one or more search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search to correlate a search criteria to a searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database;
    b. utilizing a selective one or more search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria; and
    c. repeating step (b) until the research task is completed.

2. The method as claimed in claim 1 wherein when the utilized search methodology is the keyword search, the search criteria is one or more keywords input by a user.

3. The method as claimed in claim 1 wherein when the utilized search methodology is the hierarchical search, the search criteria is a selected one of a list of one or more directory items.

4. The method as claimed in claim 1 wherein when the utilized search methodology is the dichotomous key, the search criteria is a selected one of two binary items.

5. The method as claimed in claim 1 wherein when the utilized search methodology is the parametric search, the search criteria is one or more set parameters, and further wherein the parameters are set by a user.

6. The method as claimed in claim 1 wherein the searchable database is distributed into more than one physical location.

7. The method as claimed in claim 1 wherein the steps of utilizing the search methodologies are performed by a server.

8. The method as claimed in claim 7 further comprising the step of establishing an internet connection with the server to utilize the search methodologies.

9. The method as claimed in claim 8 wherein the internet connection is established with a computer system at a remote location from the server.

10. The method as claimed in claim 1 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

11. The method as claimed in claim 10 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

12. The method as claimed in claim 10 further comprising the step of maintaining the node by appropriately adding and deleting data to and from the node.

13. The method as claimed in claim 12 wherein the step of maintaining the node is performed by a node owner who maintains the corresponding node and all nodes that are linked beneath the corresponding node within the directory tree structure.

14. A research system for performing a research task within a searchable database comprising:

a. means for accessing the searchable database; and

b. means for utilizing a selective one or more search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search coupled to the means for accessing to correlate a search criteria to the searchable database for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database.

15. The research system as claimed in claim 14 wherein when the utilized search methodology is the keyword search, the search criteria is one or more keywords input by a user.

16. The research system as claimed in claim 14 wherein when the utilized search methodology is the hierarchical search, the search criteria is a selected one of a list of one or more directory items.

17. The research system as claimed in claim 14 wherein when the utilized search methodology is the dichotomous key search, the search criteria is a selected one of two binary items.

18. The research system as claimed in claim 14 wherein when the utilized search methodology is the parametric search, the search criteria is one or more set parameters, and further wherein the parameters are set by a user.

19. The research system as claimed in claim 14 wherein the searchable database is distributed into more than one physical location.

20. The research system as claimed in claim 14 wherein the means for utilizing the search methodologies is included within a server.

21. The research system as claimed in claim 20 further comprising means for establishing an internet connection with the server to utilize the search methodologies.

22. The research system as claimed in claim 21 wherein the internet connection is established with a computer system at a remote location from the server.

23. The research system as claimed in claim 14 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

24. The research system as claimed in claim 23 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

25. The research system as claimed in claim 23 further comprising means for maintaining the node by appropriately adding and deleting related data to and from the node.

26. The research system as claimed in claim 25 wherein maintaining the node is performed by a node owner who maintains the corresponding node and all nodes that are linked beneath the corresponding node within the directory tree structure.

27. A research system for performing a research task within a searchable database comprising a research server configured to utilize a selective one or more search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, to utilize a selective one or more search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of a selective one or more search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed.

28. The research system as claimed in claim 27 further comprising an interface circuit coupled to the research server to establish a connection with a computer system.

29. The research system as claimed in claim 28 wherein the connection is established with the computer system at a remote location from the interface circuit.

30. The research system as claimed in claim 29 wherein the connection is established with the remote computer system and the interface circuit over the internet to allow users to access the research system and to utilize the search methodologies to perform the research task.

31. The research system as claimed in claim 27 wherein the searchable database is distributed into more than one physical location.

32. The research system as claimed in claim 27 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising a collection of related data and branches comprising links between the nodes.

33. The research system as claimed in claim 32 wherein the collection of related data for a particular node is displayed in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related topics.

34. The research system as claimed in claim 32 further comprising a node owner for maintaining the node by appropriately adding and deleting related data to and from the node.

35. The research system as claimed in claim 34 wherein the node owner maintains the corresponding node and all nodes that are linked beneath the corresponding node within the directory tree structure.

36. The research system as claimed in claim 32 wherein the subsequent matching items further comprise links to related nodes external to the segment of the matching item used to generate the subsequent matching item.

37. A network of devices for performing a research task within a searchable database comprising:

a. one or more computer systems configured to communicate with other systems; and

b. a research server configured to couple to the one or more computer systems to utilize a selective one or more search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search to correlate a search criteria to the searchable database coupled to the research server for generating one or more matching items, wherein each matching item corresponds to a segment of the searchable database, to utilize a selective one or more search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, and to repeat the utilization of a selective one or more search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the matching item used to generate the subsequent matching item, further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria, until the research task is completed.

38. The network of devices as claimed in claim 37 wherein the one or more computer systems and the research server are coupled together over the internet to allow users to access the research system and to utilize the search methodologies to perform the research task.

39. The network of devices as claimed in claim 38 wherein the searchable database is distributed into more than one physical location.

40. The network of devices as claimed in claim 39 wherein the searchable database is formatted in a directory tree structure, and further wherein the directory tree structure includes nodes comprising related data and branches comprising links between the nodes.

41. A method of performing a research task within a searchable database comprising the steps of:

a. performing one or more searches by utilizing a selective one or more search methodologies for each search, the search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search, to correlate a search criteria to a searchable database for generating one or more matching items, wherein the searchable database is formatted in a directory tree structure and each matching item represents a node from within the directory tree structure, wherein the node is a collection of related data, and further wherein as each successive search is performed the generated matching items represent nodes which reside further down the directory tree structure than the node from which the successive search is performed;

b. categorizing each item of data by a navigation path through the directory tree structure and by one or more parameters which are specific to the node in which the data is included;

c. accessing a specific node within the directory tree structure using a query string, wherein the query string defines the navigation path through the directory tree structure to access the specific node within the directory tree structure;

d. accessing a discrete item of data using the query string and one or more set parameters and setting a notification signal by saving the query string and the one or more set parameters;

e. notifying a user of new data entered into the searchable database in response to triggering of the notification signal, wherein triggering of the notification signal occurs when new data is entered into the searchable database and the navigation path and set parameters of the new data match the query string and set parameters saved according to the set notification signal;

f. accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by an external system utilizing an applications programming interface, wherein the applications programming interface accesses the one or more nodes within the directory tree structure using the query string; and

g. displaying the collection of related data for a particular node in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, links to related topics within the directory tree structure, links to related web sites external to the directory tree structure, or any combination thereof.

42. A method of performing a research task within a searchable database comprising the steps of:

a. utilizing a selective one or more search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search to correlate a search criteria to the searchable database for generating one or more matching

items, wherein each matching item corresponds to a segment of the searchable database;

b. utilizing a selective one or more search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search to correlate a subsequent search criteria to one of the matching items for generating one or more subsequent matching items, wherein each subsequent matching item is a sub-segment of the segment of the searchable database, and further wherein the subsequent search criteria is a selective one of the search criteria and a different search criteria;

c. selecting one of the subsequent matching items; and

d. displaying a collection of related data corresponding to the selected subsequent matching item into an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, and links to related objects.

43. A method of performing a research task within a searchable database comprising the steps of:

a. performing one or more searches by utilizing a selective one or more search methodologies for each search, the search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search, to correlate a search criteria to the searchable database for generating one or more matching items, wherein the searchable database is formatted in a directory tree structure and each matching item represents a node from within the directory tree structure, wherein the node is a collection of related data, and further wherein as each successive search is performed the generated matching items represent nodes which reside further down the directory tree structure than the node from which the successive search is performed;

b. categorizing each item of data by a navigation path through the directory tree structure and by one or more parameters which are specific to the node in which the data is included; and

c. accessing a specific node within the directory tree structure using a query string, wherein the query string defines the navigation path through the directory tree structure to access the specific node within the directory tree structure.

44. The method as claimed in claim 43 further comprising the steps of:

a. accessing a discrete item of data using the query string and one or more set parameters and setting a notification signal by saving the query string and the one or more set parameters; and

b. notifying a user of new data entered into the searchable database in response to triggering of the notification signal, wherein triggering of the notification signal occurs when new data is entered into the searchable database and the navigation path and set parameters of the new data match the query string and set parameters saved according to the set notification signal.

45. The method as claimed in claim 43 further comprising the step of accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by an external system utilizing an applications programming interface, wherein the applications programming interface accesses the one or more nodes within the directory tree structure using the query string.

46. The method as claimed in claim 43 further comprising the step of displaying the collection of related data for a particular node in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, links to related topics within the directory tree structure, links to related web sites external to the directory tree structure, or any combination thereof.

47. A method of performing a research task within a searchable database comprising the steps of:

a. performing one or more searches by utilizing a selective one or more search methodologies for each search, the search methodologies including keyword search, hierarchical search, dichotomous key search, and parametric search, to correlate a search criteria to the searchable database for generating one or more matching items, wherein the searchable database is formatted in a directory tree structure and each matching item represents a node from within the directory tree structure, wherein the node is a collection of related data, and further wherein as each successive search is performed the generated matching items represent nodes which reside further down the directory tree structure than the node from which the successive search is performed;

b. categorizing each item of data by a navigation path through the directory tree structure and by one or more parameters which are specific to the node in which the data is included; and

c. accessing one or more nodes within the directory tree structure and obtaining data from the one or more nodes by an external system utilizing an applications programming interface, wherein the applications programming interface accesses the one or more nodes within the directory tree structure using a query string, wherein the query string defines the navigation path through the directory tree structure to access the specific node within the directory tree structure.

48. The method as claimed in claim 47 further comprising the steps of:

a. accessing a discrete item of data using the query string and one or more set parameters and setting a notification signal by saving the query string and the one or more set parameters; and

b. notifying a user of new data entered into the searchable database in response to triggering of the notification signal, wherein triggering of the notification signal occurs when new data is entered into the searchable database and the navigation path and set parameters of the new data match the query string and set parameters saved according to the set notification signal.

49. The method as claimed in claim 47 further comprising the step of displaying the collection of related data for a particular node in an encyclopedia-like format, wherein the encyclopedia-like format includes text, graphics, links to related topics within the directory tree structure, links to related web sites external to the directory tree structure, or any combination thereof.